

Anti-diabetically effective 2-substituted-N-(5-substituted-2-pyrimidinyl)hydrindene-5-sulfonamides. Heerdt, Ruth; Huebner, Manfred; Schmidt, Felix Helmut; Stach, Kurt; Muth, Karl. (Boehringer Mannheim G.m.b.H.). S. African (1969). 26 pp. CODEN: SFXOAB ZA 6806875 19690326 Patent written in English. Application: ZA Priority: DE 19671024. CAN 72:12763 AN 1970:12763 CAPLUS

Patent Family Information

Abstract

The title compds. (I, R = Et, Pr, PrO, iso-Pr, MeOCH₂, EtOCH₂, PhCH₂, PrS, EtO, cyclohexylmethyl, cyclohexyl, cyclohexyloxy, or 5,6,7,8-tetrahydroquinazolinyl; R₁ = H or Me; R₂ = 2,5-(MeO)CIC₆H₃, 2,5-(MeO)BrC₆H₃, cyclohexyl, m-MeC₆H₄, m-ClC₆H₄, PhSCH₂, 3-methoxy-2-thienyl, 2-furyl, PhOCH₂, Me(o-MeC₆H₄)N, o-MeOC₆H₄, 3-chloro-2-thienyl, PhCH₂CH₂, m-F₃CC₆H₄, m-FC₆H₄, 2,5-(MeO)CIC₆H₃CH₂CH₂, or PhCH₂O) are prepd. by reacting II (X = COR₂, Y = Cl; X = H, Y = 2-pyrimidinylamino; X = R₂CO, Y = H₂N) with the appropriate 2-aminopyrimidine, R₂COCl, and 2-chloropyrimidine, resp. For example, sulfochlorination of 2-(5-chloro-2-methoxybenzamido)hydrindene gave II (X = 2,5-(MeO)CIC₆H₃CO, Y = Cl) (III), m. 133°. III (3.2 g) was added to 1.23 g 2-amino-5-propoxypyrimidine in 5 ml anhyd. pyridine, and the mixt. kept overnight and heated 2 hr on a steam bath to give 75% I (R = PrO, R₁ = H, R₂ = 5,2-(MeO)C₆H₃), m. 122-4°. Alk. hydrolysis of I (R = iso-Bu, R₁ = H, R₂ = OEt) gave 5-(5-isobutyl-2-pyrimidinylaminosulfonyl)-2-aminohydrindene (IV), 235-40°. A soln. of 2 g IV in 3.4 ml 2N NaOH and 5 ml water was treated with 1.2 g l-indolinecarbonyl chloride in 10 ml CH₂Cl₂ to give 59.8% I (r = iso-Bu, R₁ = H, R₂ = 1-indolyl), m. 247-9°. A mixt. of 2.3 g II (X = PhCH₂CH₂CO, Y = NH₂), 1.15 g 2-chloro-5-isobutylpyrimidine and 0.9 g K₂CO₃ was heated to 190° to give I (R = iso-Bu, R₁ = H, R₂ = PhCH₂CH₂), m. 202-4°.